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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
BAUTISTA, XIOMARA L	

ART UNIT	PAPER NUMBER
2173	

DATE MAILED: 09/25/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/467,074	ORDING ET AL.	
	Examiner	Art Unit	
	X L Bautista	2173	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 June 2002* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22,24-72 and 74-127* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *109-117* is/are allowed.

6)☒ Claim(s) *See Continuation Sheet* is/are rejected.

7)☒ Claim(s) *6-8,29,30,33,34,39-41,65,66,69,70,75,77,78,101,102,105,106,124 and 125* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Continuation of Disposition of Claims: Claims rejected are 1-5,9-22,24-28,31,32,35-38,42-64,67,68,71,72,74,76,79-100,103,104,107,108,118-123,126 and 127.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-22, 24-72, and 74-107 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-5, 9, 10, 12-15, 20, 21, 25-27, 35-38, 42-46, 48-51, 56, 57, 61-63, 71, 74, 76, 79-82, 84-87, 92, 93, 98, 99, 107, 118-123, and 127 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Selker* (US 5,736,974) in view of *Carpendale et al* (Distortion Viewing Techniques for 3-Dimensional Data, 1996).

Claims 1, 35, 71, 107, and 118:

Selker discloses a method for improving visibility and selectability of icons. Enhanced visibility of icons and other types of menu items is provided by increasing size and or skew (animation) or both of one or more icons or menu items in a generally

inverse relation to proximity of a cursor image address to particular icons or menu items (abstract; col. 4, lines 59-67; col. 9, lines 55-67; col. 10, lines 1-7). Selker does not teach repositioning the other tiles along the bar to accommodate the varied size of the one tile however, Carpendale discloses a method for distortion viewing techniques for 3-dimensional data that applies magnification and distortion. Carpendale teaches that the method allows magnification of a chosen focus to display detail (page 48, col. 2, lines 13-28; figs. 6 & 16; page 50, col. 1, lines 18-31). Carpendale teaches repositioning the neighbors (other tiles) to accommodate the varied size of the focal object, the viewing access distortion restores the visibility of the central focus (page, col. 2, lines 28-31; figs. 1, 2, 3, 5, 11, 12, 16, 17, & 18).

Claims 2, 3, 4, 36, and 37:

See claim 1. See Selker, col. 8, lines 26-34; figures 1-5.

Claims 5, 38, 74, and 76:

See claim 1. Selker teaches that if icons E and P (fig. 5) are at arbitrary locations on the screen 61, 62 and the cursor at another arbitrary location, evaluation of d' and d" would ordinarily be done in regard to both orthogonal directions on the display by, for example, applying the well-known Pythagorean theorem to the distances between the icon address and the cursor address in both coordinate directions. Differences in d (distance) provide for different degrees of expansion of respective icons (col. 5, lines 33-55; col. 6, lines 1-17, 40-47; col. 7, lines 27-30, 36-44, 51-57).

Claims 9, 45, 81, and 123:

See claim 1. Carpendale teaches the use of four different functions, orthogonal, step, sine, and Gausian (page 47, col. 2, lines 5-10; page 50, col. 1, lines 8-13).

Claims 10 and 82:

See claim 1. Selker does not teach the position of the icon menu (bar) however, it would have been obvious to one having ordinary skill in the art at the time the invention was made to position Selker's bar at the bottom of the display because the user can easily access and manipulate the icons.

Claims 12, 48, and 84:

See claim 1. Selker teaches that a value is assigned to an attribute data representing a visual feature, the assigned value being from a group of at least three different values. The menu items are displayed in accordance with the assigned attribute data value (col. 9, lines 29-35, 63-67; col. 10, lines 1-7).

Claims 13, 49, and 85:

Selker teaches that the size of the menu item is limited in response to detection of the cursor location within the detection zone of the menu item (col. 8, lines 55-60; col. 9, lines 29-36; col. 10, lines 21-23).

Claim 14, 44, 50, 80, and 86:

Selker teaches that the user can enlarge the icon at will and also shrink the icon by moving the cursor toward the normal position of the icon in the unexpanded (default) icon menu (col. 6, lines 60-67; col. 7, lines 1-26).

Claims 15, 51, and 87:

Selker teaches that an icon can be expanded to an arbitrary size (col. 5, lines 34-55; col. 6, lines 1-17, 40-47; col. 7, lines 36-44).

Claims 20, 56, and 92:

See claim 1. See Selker, figures 1-5.

Claims 21, 57, and 93:

See claim 1. See Carpendale, figs. 1-25.

Claims 25 and 61:

See claim 1. Selker teaches that the size of a menu item (tiles) is changed when the cursor is positioned on or close to the item (abstract; col. 4, lines 7-28).

Claims 26, 62, and 121:

See claim 1. See Selker, col. 5, lines 19-33.

Claims 27, 63, and 99:

See claim 1. See Selker, figures 1-5.

Claims 42 and 119:

See claim 1. Carpendale teaches magnification of icons proximate to the focal object (figs. 1, 2, 3, 5, 11, 12, 15-17).

Claim 43:

Selker teaches user selection of a magnitude of the magnification (col. 6, lines 40-47, 60-67; col. 7, lines 1-11; col. 9, lines 29-36).

Claim 46:

See Selker, col. 7, lines 4-11; figures 1-5.

Claim 79:

Selker teaches that the size factor can be limited for limiting size expansion (col. 7, lines 18-25; col. 8, lines 1-10, 55-60).

Claim 98:

See claim 5. See Selker, col. 5, lines 33-55; col. 6, lines 1-17, 40-47; col. 7, lines 27-30, 36-44, 51-57; figs. 2-5.

Claim 120:

Selker teaches that icons are magnified by a factor that is preferably in some linear or non-linear inverse proportionate relationship to the proximity of the cursor (col. 5, lines 46-50).

Claim 122:

Selker teaches that depending on the enhancement mode, any and all of the variations of display enhancement may be selectively produced (col. 9, lines 29-35).

Claim 127:

See claim 1. See Selker, figs. 1-5.

3. Claims 11, 16, 17, 22, 24, 47, 52, 53, 58-60, 72, 83, 88, 89, 94-97, 108, and 126 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Selker/Carpendale* in view of *Malamud et al* (US 5,825,357).

Claims 11, 47, and 83:

See claim 1. Selker/Carpendale does not teach that there is a gap between the bar and the bottom of the display. However, Malamud discloses a tool interface which includes a tray section 12 and an applications section 14. Display mode controls associated with the tray section enable a user to define how, where, and when the tray section and computer resources associated with the tray are displayed. The user may either attach the tray section to any of the four sides of the display screen or display the tray section as a palette (fig. 3). In the palette mode of display for the tray section, both the dimensions and position of the tray section are modifiable by the user (abstract; col. 4, lines 35-48). Therefore, it would have been obvious to an artisan in the art at the time of invention to include Malamud's palette mode in Selker/Carpendale's invention because the user is enabled to define the bar's position leaving, or not, a space between the bar and the bottom of the display.

Claims 16, 17, 52, 53, 88, and 89:

Selker/Carpendale does not teach that the bar is removed from the display when the cursor moves away from the bar. However, Malamud teaches that in the collapse mode the tray section is collapsed to a width of four pixels, enabling the applications section to occupy substantially the entire screen (col. 5, lines 52-67; col. 6, lines 1-13). Thus, it would have been obvious to a person having ordinary skill in the art at the time of invention to include Malamud's teachings in Selker/Carpendale's invention because the user is enabled to instruct the computer system to hide or minimize the toolbar when

needing to occupy the entire screen.

Claims 22, 24, 58, 60, 94, 96, and 97:

See claim 20. Malamud teaches a permanently displayed extended command area 23 of the tray section 12, referred to as an embedded computer resource. The embedded computer resource includes a system icon 28 and a digital clock display 44, but other computer resources can be added to the command area 22 (col. 6, lines 41-60; col. 9, lines 49-61).

Claims 59 and 95:

See claim 22. See Malamud, figure 2.

Claim 72:

See claim 21. Malamud teaches that tiles have a minimum size which is changed when the panel exceeds the minimum size requirement (col. 5, lines 12-22; col. 6, lines 41-60; col. 10, lines 54-60).

Claim 108:

See claim 22. Malamud teaches that the user can control the allocation of the tiles (col. 7, lines 34-36; col. 10, lines 43-53; col. 11, lines 7-20; col. 13, lines 47-67; col. 14, lines 1-11, 48-53).

Claim 126:

See claim 24. Malamud teaches permanent and nonpermanent objects embedded in the bar. Malamud teaches icons (outermost ends) 28 and 34 which are predetermined, and the other icons are user-selectable (col. 6, lines 41-60; fig. 2).

4. **Claims 18, 19, 54, 55, 90, and 91 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Selker/Carpendale* in view of *Ludolph et al* (US 5,657,049).**

Claims 18, 54, and 90:

Selker/Carpendale does not teach that when the bar is removed it appears to slide into an edge of the display in response to a keystroke. However, Ludolph discloses a Desk Drawer which is closed (removed) when the cursor pointer 50 leaves the drawer region 35. Mouse and/or keyboard commands may be effectuated to close the Desk Drawer (col. 9, lines 31-39; col. 13, lines 16-22). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include Ludolph's teachings in Selker/Carpendale's invention because animation creates the illusion of movement, it adds realism, the drawer not only disappears but the user can actually see it opening and closing.

Claims 19, 55, and 91:

See claim 18. Ludolph teaches that the computer automatically closes (autohide) Desk Drawer when the cursor pointer leaves the drawer region 35 (col. 13, lines 16-22).

5. **Claims 28, 31, 32, 64, 67, 68, 100, 103, and 104 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Selker/Carpendale* in view of *Mackinlay et al* (US 6,256,649 B1).**

Claims 28, 64, and 100:

Selker/Carpendale does not teach that labels associated with the tiles are displayed with a first predetermined fade-in rate when the cursor moves proximate to a tile from another tile. However, Mackinlay discloses an animated spreadsheet wherein a user can specify the current cell just by moving the mouse cursor on the cell. When the cursor comes in a cell, the data flow graph associated with the cell gradually appear on the screen (fades in), and it gradually disappears when the cursor moves away from the cell (fades out), (abstract; col. 3, lines 11-26; col. 7, lines 32-37; col. 8, lines 21-48). Thus, it would have been obvious to an artisan in the art at the time the invention was made to include a fade-in and fade-out rate in Selker/Carpendale's invention because the gradual increase in visibility (fade-in) allows the icon closest to the cursor to take up most of the user's attention and the gradual disappearance (fade-out) avoids confusion when making a selection.

Claims 31, 32, 67, 68, 103, and 104:

See claim 28. Mackinlay teaches that when the cursor comes in a cell, the data flow graph associated with the cell gradually appear on the screen (fades in), and it gradually disappears when the cursor moves away from the cell (fades out), (abstract; col. 3, lines 11-26; col. 7, lines 32-37; col. 8, lines 21-48).

Allowable Subject Matter

6. Claims 109-117 are allowed.

7. Claims 6-8, 29, 30, 33, 34, 39-41, 65, 66, 69, 70, 75, 77, 78, 101, 102, 105, 106, 124, and 125 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record does not teach or suggest a predefined relationship between an effect width W, a default height h, and a selected maximum height H including a function S defined as: $S = ((H - h) \div \text{sine} (\pi \times (h \div 2) \div (W \times 2))$, as recited in claims 6, 39, 75, and 109.

Prior art of record does not teach or suggest a second predetermined fade-in rate when the cursor moves proximate to a tile from outside a region associated with the bar, as recited in claims 29, 65, 103, and 112; and a second fade out rate when the cursor moves out of a region associated with the bar, as recited in claims 33, 69, and 105.

Selker (US Patent 5,736,974) discloses a distance d which can be computed from an address within the icon menu 30. The icon menu must be unaffected for cursor image positions over most of the display area or window. Some specific or inherent threshold of proximity between the icon menu and cursor selection position 25 should be provided (col. 5, lines 19-32; col. 6, lines 10-17; col. 7, lines 35-43; col. 8, lines 37-45). Selker fails to teach that the position of the tile varies based on a predefined relationship including a function S defined as $S = ((H - h) \div \text{sine} (\pi \times (h \div 2) \div (W \times 2))$.

Mackinlay et al (US Patent 6,256,649 B1) discloses an animated spreadsheet wherein a brief animation is displayed after a user indicates interest in an annotation. When the cursor comes in a cell the data flow graph associated with the cell gradually appears on the screen (fades in), and it gradually disappears when the cursor moves away from the cell (fades out). Mackinlay fails to teach or suggest a second predetermined fade-in rate when the cursor moves proximate to a tile from outside a region associated with the bar, and a second fade out rate when the cursor moves out of a region associated with the bar.

Carpendale discloses distortion viewing techniques for 3-dimensional data that solves the problem of internal access using a distortion function that creates a clear line of sight to the focus revealing sections previously obscured. The distortion is symmetric about the line of sight and is smoothly integrated back into the original 3D layout. Carpendale teaches that the size of an icon can be changed when the cursor is placed close to it however, Carpendale fails to teach or suggest that the position of the icon changes in accordance with a predefined relationship including a function S defined as $S = ((H - h) \div \text{sine} (\pi \times (h \div 2) \div (W \times 2))$.

Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Inquiries

2. Responses to this action should be mailed to: Commissioner of Patents and trademarks, Washington, D.C. 20231. If applicant desires to fax a response, (703) 308-9051 may be used for formal communications or (703) 308-6606 for informal or draft communications. Please label "PROPOSED" or "DRAFT" for informal facsimile communications. For after final responses, please label "AFTER FINAL" or "EXPEDITED PROCEDURE" on the document. Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ms. X. L. Bautista whose telephone number is (703) 305-3921. The Examiner can normally be reached on M - Th. from 8:00 - 6:00 ET. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, John Cabeca, can be reached at (703) 308-3116.

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark Office on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

JOHN CABECA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

XLB

September 16, 2002